AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. **(Previously Presented)** A method of fabricating a laser, said method comprising the steps of:

(a) depositing a photoresist on epitaxially grown layers;

(b) patterning said photoresist to form an aperture area;

(c) depositing a dielectric material on said patterned photoresist;

(d) depositing a liftoff layer on said dielectric material; and

(e) removing portions of said dielectric material and liftoff layer that border said aperture area;

(f) implanting regions of the epitaxially grown layers bordering said aperture, wherein said remaining portion of said dielectric material and said liftoff layer serve as an implantation guide; and

(g) depositing a metal layer on said dielectric material.

2. **(Currently Amended)** The method of claim 1, wherein said epitaxially grown layers comprise a bottom semiconductor Distributed Bragg Reflector stack, an active region and a partial top semiconductor Distributed Bragg Reflector stack.

3. **(Original)** The method of claim 2, wherein said top semiconductor Distributed Bragg Reflector stack contains material chosen from the group consisting of aluminum, gallium, arsenic, indium, phosphorus and combinations thereof.

4. **(Currently Amended)** The method of claim 3, wherein said top semiconductor Distributed Bragg Reflector stack comprises alternating layers of aluminum gallium arsenide[[,]] and aluminum arsenide.

5. **(Original)** The method of claim 4, wherein said top semiconductor Distributed Bragg Reflector stack is doped.

6. **(Original)** The method of claim 2, wherein said top semiconductor Distributed Bragg Reflector stack has forty individual layers or less.

7. **(Original)** The method of claim 6, wherein said top semiconductor Distributed Bragg Reflector stack has twenty individual layers or less.

8. **(Original)** The method of claim 7, wherein said top semiconductor Distributed Bragg Reflector stack has eleven individual layers or less.

9. **(Original)** The method of claim 8, wherein said top semiconductor Distributed Bragg Reflector stack has seven individual layers or less.

10. **(Original)** The method of claim 1, wherein said dielectric material is chosen from the group consisting of silicon dioxide, titanium dioxide, silicon nitride, and combinations thereof.

11. **(Original)** The method of claim 10, wherein said dielectric material is chosen from the group consisting of silicon dioxide, titanium dioxide, and combinations thereof

12. **(Original)** The method of claim 11, wherein said dielectric material is silicon dioxide.

13. **(Original)** The method of claim 1, wherein said device is a vertical cavity surface emitting laser.

14. **(Original)** A laser resulting from the method of claim 1.

15-46 **(Cancelled)**

47. **(New)** A method of fabricating a laser, the method comprising the steps of:

forming a dielectric mirror on epitaxially grown layers in such a manner that the extent of the dielectric mirror is never larger than the laser aperture during fabrication, wherein the method of forming the dielectric mirror comprises:

depositing a photoresist on the epitaxially grown layers;

patterning the photoresist to form an aperture area;

depositing a dielectric material on the patterned photoresist;

depositing a liftoff layer on the dielectric material; and

removing portions of the dielectric material and liftoff layer that border the aperture area;

implanting regions of the epitaxially grown layers bordering the aperture, wherein the remaining portion of the dielectric material and the liftoff layer serve as an implantation guide; and

depositing a metal layer on the dielectric material.

48. **(New)** The method of claim 47, wherein the epitaxially grown layers comprise a bottom semiconductor Distributed Bragg Reflector stack, an active region and a partial top semiconductor Distributed Bragg Reflector stack

49. **(New)** The method of claim 47, wherein the top semiconductor Distributed Bragg Reflector stack has eleven individual layers or less.

50. **(New)** A method of fabricating a laser, the method comprising:

depositing a photoresist on epitaxially grown layers, wherein the epitaxially grown layers comprise:

a bottom semiconductor Distributed Bragg Reflector stack;

an active region; and

a partial top semiconductor Distributed Bragg Reflector stack, wherein the top semiconductor Distributed Bragg Reflector stack has twenty individual layers or less and contains material chosen from the group consisting of aluminum, gallium, arsenic, indium, phosphorus, and combinations thereof;

patterning the photoresist to form an aperture area;

depositing a dielectric material on the patterned photoresist, wherein the dielectric material is chosen from the group consisting of silicon dioxide, titanium dioxide, silicon nitride, and combinations thereof;

depositing a liftoff layer on the dielectric material; and

removing portions of the dielectric material and liftoff layer that border the aperture area;

implanting with a damage implant regions of the epitaxially grown layers bordering the aperture but not penetrating the aperture, wherein the remaining portion of the dielectric material and the liftoff layer serve as an implantation guide; and

depositing a metal layer on the dielectric material.

51. **(New)** The method of claim 50, wherein the top semiconductor Distributed Bragg Reflector stack has eleven individual layers or less.